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REMARKS

Applicant respectfully requests entry of this Amendment and reconsideration of the pending claims. Claims 1-12, 17, 19-30 are canceled. Claims 13 and 18 are amended. Accordingly, claims 13-16 and 18 are currently pending in the above-identified patent application.

Applicant hereby confirms the oral selection/election made November 15, 2005 and selects/elects Group I, species B, claims 13-16, and 18 for prosecution on the merits. The remaining claims are canceled.

Independent claims 13 and 18 have been amended to exclude lithium, potassium, and sodium compositions. The Applicant respectfully submits that the amended claims are patentable over the cited references.

Claims 13 and 18 were rejected under 35 U.S.C. 102 (e) as anticipated by Chen et al., U.S. patent Application No. 2003/0113252 (Hereafter "Chen '252"). While Chen '252 may disclose alkali metals, only Li-C and K-C intercalated compounds are shown as specific examples. There is no apparent motivation or suggestion in Chen '252 to use non-Alkali metals. As defined in the claims, " Al_4C_3 , Mg_2C_3 , MgC_2 , AlTi_2C , AlTi_3C , AlZrC_2 , $\text{Al}_3\text{Zr}_5\text{C}$, $\text{Al}_3\text{Zr}_2\text{C}_4$, $\text{Al}_3\text{Zr}_2\text{C}_7$, or a combination comprising at least one of the foregoing carbides" are included in amended independent Claim 1 - ALL OF WHICH ARE NON-ALKALI METALS. Applicant submits that it would be obvious for one of ordinary skill in the art to either modify the references to only try other Alkali metals. Applicant submits further that it would not be obvious for one of ordinary skill in the art to substitute a composition a claimed composition with one of the compositions disclosed in the references. For at least the same reasons that claim 13 is allowable, amended claim 18 is allowable also. Notice that claims 13, 18, and claims 14, 15, 16 that depend therefrom, are allowed is respectfully requested.

Claim 14 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chen '252 in view of Jensen et al., U.S. Patent Application No. 2004/0009121 (Hereafter "Jensen"). Applicant respectfully disagrees that the combination is obvious for the following reasons.

As noted above, Chen '252 does not disclose the compositions in the amended claim 13 or their suitability for use. Because there is no suggestion that the compositions

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can be used in the defined manner, it would not be obvious to one of ordinary skill in the art to reproduce the claimed method. Again, there is neither disclosure, suggestion, or teaching of the claim elements, nor a reasonable suggestion that such a modification or substitution would work in the base reference. To cure this deficiency one might look to the second reference – Jensen.

However, Jensen does not disclose heating of the compositions as defined in claim 13 either. Like Chen '252, Jensen also relies on an Alkali-metal base composition (Sodium Alanate). One of ordinary skill in the art, looking to combine the references would still end up with an Alkali-metal alanate – different from the invention as claimed.

Because characteristics differ from composition to composition, such as hydrogen storage/release properties, and the energy response from composition to composition also differs, it cannot be obvious that obvious substitutions or modifications can be made in either composition or energy source. There is no indication, other than Applicant's disclosure, that the heating of the claimed compositions using microwave radiation, convectional heating, or electrical resistive heating would provide energy that would achieve the same or a similar response from the compositions disclosed in the references. At best, it may be obvious to try different heating methods to determine their suitability. But, "obvious to try" is not the standard that needs to be met for a *prima facie* case of obviousness. Rather, there must be a reasonable expectation of success by one of ordinary skill in the art. That has not been demonstrated here. Applicant submits that claim 14 is allowable over the cited references, alone or in combination.

Claim 15 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chen '252 in view of Chen et al., U.S. Patent Application No. 2003/0129126 (Hereafter "Chen '126"). Claim 15 recites addition of dopants to the claimed compositions. Chen '126 recites dopants to metal nitrogen-based compounds that are different from the claimed compositions. The doping of nitrogen-based compounds does not implicate that the carbides as defined in the claims can be doped in the same manner or for the same reasons. There is no suggestion, motivation, or teaching in either Chen '252, or Chen '126 to combine the doping of one material with the doping of a different material. Even if the doping were successful, one of ordinary skill in the art would not possibly be able to predict what would be the properties of the resultant composition. Applicant submits

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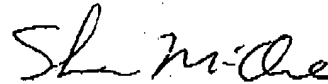
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that because the modification/combination would not be obvious to one of ordinary skill in the art, that claim 15 should be allowed over the cited references.

Claim 16 depends from an allowable base claim. Therefore, Applicant respectfully submits that claim 16 is allowable. Applicant respectfully requests the Examiner to reconsider the rejection of claim 16.

In view of the amendments, Applicant submits that the currently pending claims of the patent application are allowable over the cited references, and that the application is in condition for allowance. Accordingly, Applicant solicits allowance of the pending claims and movement of the present patent application on to issuance. If the Examiner has any questions regarding the present patent application, the Examiner can contact the below-signed counsel of Applicant at telephone number (518)-387-5448.

Respectfully submitted,



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